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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,322	01/26/2001	Ronald E. Huffman	12373.16US01	7517
23552	7590	01/22/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			LEWIS, RALPH A	
			ART UNIT	PAPER NUMBER
			3732	14
DATE MAILED: 01/22/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/770,322

Applicant(s)

HUFFMAN, RONALD E.

Examiner

Ralph A. Lewis

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-31, 33-43 and 45-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 47-50 is/are allowed.
- 6) ☐ Claim(s) 1-31, 33-43, 45, 46 and 51-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Rejections based on Prior Art

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 10-13, 15, 16, 20-22, 26, 41 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Dew (3,436,827).

Dew discloses a stone member 40 having a shape that corresponds to a patient's gum line, an encasement member 30 defining a cavity in which the stone member is cast (note column 3, lines 52-72). And structure 56 that fixedly retains the stone member 40 within the cavity of the encasement member 30. In regard to claim 2, note concave socket 45 and latch receiver 50. In regard to claim 3, note ball 54 at bottom end of Figure 3 and latch receiver 50 at top end of Figure 3. In regard to claim 10 note projection 56. In regard to claim 12, note recess 77. In regard to claim 13, note support surface 12 and perpendicular wall 34. In regard to claims 41 and 42, note encasement member 30 and attachment plate 12.

In response to the rejection based on Dew applicant has amended independent claims 1, and 13 to require that the structure that fixedly retains the stone member be "within the cavity." The examiner notes that the lower surfaces of 56 meet the limitation. Applicant further amended the claims to require that the stone member and encasement member are "inseperable" and argues that the Dew device can be taken apart so as to separate the stone member from the encasement member. The examiner notes that

likewise applicant's device could be taken apart with the proper tools. Just like applicant's device as long as the Dew device isn't pried apart the encasement member and stone model are held together firmly in an inseperable manner. The examiner suggests that applicant focus attention on and claim the structure which provides for the indistinct "inseperable" functional relationship (e.g. rigid encasement member or projection with undercuts), rather than using indistinct terminology to claim only the functional relationship.

Claims 1, 2, 4, 21, and 23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Darnand (5,100,317).

Darnand discloses a stone member 13, 14 corresponding to a portion of a patient's gum line, an encasement member 3 and structure 4, 12 that fixedly retains the stone member within the cavity. In regard to claim 2, note socket 4 and latch 12.

In response to Darnand, applicant argues that you can separate the Darnaud encasement member and stone model and the claims require that the two be "inseperable." The Darnaud stone member is fixed and locked into position with screw member 12. The two members at this point are "inseperable," they only become seperable after the encasement member is taken apart (i.e. screw member 12 is removed). Again the examiner is of the position that applicant's device could also be taken apart. The examiner suggests that applicant focus attention on and claim the structure which provides for the indistinct "inseperable" functional relationship.

Claims 45 and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Huffman (4,378,929).

Note Figures 10 and 11 where encasement member 80 is filled with uncured casting material and cast dental model 94 having pins 96 is placed adjacent thereto and cured such that the pins extend into the uncured material.

In response to the present rejection, rather than discussing the Figure 10, 11 embodiment of Huffman applied in the rejection, applicant discusses an earlier embodiment. The examiner is of the position that the encasement member 80 of Huffman which surrounds and molds the casting material meets the relatively vague rigid connection limitation. The two members are both connected together until the Huffman encasement member is deformed. Just as with Huffman, applicant's disclosed encasement member could be deformed to separate the encasement member from the cured casting. The examiner suggests that applicant positively recite structural distinctions (e.g. rigid encasement member or projection with undercuts) between applicant's disclosed invention and that of the prior art rather than attempting to rely on broad indistinct functional terminology (rigidly connected) that is open to a number of interpretations.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-9, 13-20, 24, 25, 27-31, 33, 34, 36, 37, 39, 40, 43 and 51-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dew (3,436,827) in view of Huffman (4,842,242).

Dew does not disclose the use of the stone model 40 with an articulator. Huffman teaches that it is desirable to attach encased stone models (Figure 9) to an articulator by providing for a slot 106 in the encasement member 102 to which an articulator is attached. To have provided a slot in wall member 24 to which an articulator may be attached as taught by Huffman would have been obvious to one of ordinary skill in the art.

In regard to claims 4 and 39, note the attachment plate flat surface of element 22 (Huffman) which is attached to the encasement member. Providing for such an attachment in Dew would have been obvious to one of ordinary skill in the art. In regard to claims 5 and 40, note the ball and socket attachment at 22 of Huffman. Providing for such an attachment in Dew would have been obvious to one of ordinary skill in the art. In regard to claim 6, element 22 can be considered part of the "encasement member." In regard to claims 13 and 27, to the extent that Dew does not disclose the "cavity generally corresponding to the curvature of a gum" limitation, Huffman teaches that it is desirable to curve the encasement member to correspond to the curvature of the teeth and gums. To have curved the encasement member 30 of Dew correspond to the curvature of the teeth and gums as taught by Huffman would have been obvious to one of ordinary skill in the art.


Allowable Subject Matter

Claims 47-50 are allowed. Claim 35 is objected to as be dependent on a rejected base claim, but would be allowable if rewritten in independent form to include all of the limitations of the claims from which it depends.

Action Made Final

Any inquiry concerning this communication should be directed to Ralph Lewis at telephone number (703) 308-0770. Fax (703) 872-9302. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Kevin Shaver, can be reached at (703) 308-2582.

R.Lewis
December 13, 2003


Ralph A. Lewis
Primary Examiner
AU 3732